

STRUCTURE 173

This structure is a single-barreled, reinforced concrete pipe culvert, located on the Levee 31N borrow canal about 9 miles northwest of Homestead. Control is effected by a manually operated sluice gate mounted on a reinforced concrete head structure at the northeast end of the culvert.

PURPOSE

This structure is located at the drainage divide in the Levee 31N borrow canal. Its original purpose was to provide very limited flood control flows by diverting them either eastward through C-1 or south and west through L-31N borrow canal whenever downstream capacity was available. Since the construction of the South Dade Conveyance System, S-173 is used in conjunction with S-331 to pass water to the south so as to protect areas to the west of L-31N according to the IOP.

OPERATION

This structure is operated in either the water supply or flood control mode in conjunction with S-331. The operation is described more fully for that structure.

FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>100</u> cfs
	* <u> </u> % SPF
Headwater Elevation	<u>5.0</u> feet
Tailwater Elevation	<u>4.5</u> feet
Type Discharge	controlled <u>submerged</u>

*Design flow not related to Standard Project Flood

DESCRIPTION OF STRUCTURE

Type	<u>Reinforced concrete pipe culvert with upstream control</u>
Number of barrels	<u>1</u>
Size of barrel	<u>6 ft.</u>
Length of barrel	<u>70 feet</u>
Flow line elevation	<u>-2.5 feet</u>

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Service bridge elevation 13.5 feet

Water level which will by-pass structure 11.0

Control Structure Discharge is controlled by gate mounted on a reinforced concrete upstream end of the culvert.

Gates

Number 1

Type sluice gates

Size 6 ft. square

Control Electric gear driven, remote computer control

Lifting Mechanism

Normal Power Source commercial

Type pedestal mounted, manually operated hoist

Date of Transfer: August 15, 1967

ACCESS: from U.S. Highway 41 via access road on crown of Levee 31N

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level Upstream and downstream staff gauges and telemetry digital recorder

Gate Position Recorder Telemetry recorder

DEWATERING FACILITIES None

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